

ABSTRACT OF THE DISCLOSURE

An acceleration sensor including a bimorph type acceleration detection element including a pair of surface acoustic wave resonators laminated to each other with the back surface of one resonator bonded to the back surface the other resonator. Each resonator includes a piezoelectric substrate and a pair of IDT electrodes which are arranged on the front surface of the piezoelectric substrate. The acceleration detection element is supported at the end thereof so that the acceleration detection element is deflected in the direction of thickness under acceleration. Acceleration is detected by detecting a difference between frequency changes of the two surface acoustic wave resonators or a difference between impedance changes of the two surface acoustic wave resonators, which takes place under acceleration.